Architect-Engineer Scope of Work – Revision 1 Preparation of Feasibility Study, Design Documentation Report And Plans and Specifications for Trail Section 3C Of The Onondaga Lake Trail & Habitat Project Onondaga County, New York

18 September, **2002**

Parsons Engineering Science, Inc.

Delivery Order No. 00X of Contract No. DACW49-01-D-0003

1.0 General:

The Architect-Engineer Contractor, hereinafter referred to as the A-E, shall provide all labor, material, equipment and laboratory facilities necessary to perform the professional services described in detail below. The A-E shall furnish the required personnel, equipment, instruments, and transportation, as necessary to accomplish the required services and furnish to the Government reports and other data together with supporting material developed. During the execution of the work, the A-E shall provide adequate professional supervision and quality control to assure the accuracy, quality, completeness and progress of the work.

2.0 Introduction:

In 1990, the County of Onondaga, in cooperation with other County, State and Federal agencies completed the preliminary planning and design of Trail Section 3 of the "Onondaga Lake Canalways Trail". Trail Section 3 is an integral part of the project to complete a multi-use trail around the perimeter of Onondaga Lake. The *Final Design Report, dated December 1992, Onondaga Lake Bikeway, East-West Shore Link* (Final Design Report) set forth four (4) alternate routes for Trail Section 3 (i.e., A – D) based upon providing safe access from the east side of the bridge over Onondaga Creek, to the north side of the existing railroad bridge over the Onondaga Lake Parkway. The Final Design Report established Trail Section 3A as the preferred alternative.

Since 1992, a number of circumstances have become apparent and certain conditions have changed requiring modifications to the plan recommended by the Final Design Report. Consequently, a Draft Re-Evaluation Statement was completed in 2002 by Camp, Dresser, McKee (CDM) on behalf of the Onondaga County Department of Transportation. To optimize the trail corridor, the Draft Re-Evaluation Report reassessed the cost and feasibility of the proposed alternatives, in light of current circumstances. Trail Section 3C, which was previously studied and dismissed, is now the alternative preferred by Onondaga County. Implementation of the conceptual alignment for Trail Section 3C will include construction of approximately 10,000 linear feet of causeway, and create approximately 22 acres of habitat area between the causeway and the lake shore.

A major feature of Trail Section 3C is avoidance of the need for trail bridges crossing over railroad tracks and roadways along the southeast shore of Onondaga Lake. Additionally, the low energy area created between the causeway/berm and shoreline will provide opportunities for creation / restoration of wetlands and enhancement of fish and benthic habitat. The Onondaga Lake Trail & Habitat Project is the subject of a joint agreement between Onondaga County and the United States Army Corps of Engineers (USACE). The anticipated schedule allows for performance of a feasibility study during 2002; completion of detailed design during 2003; and construction finished by late 2005.

3.0 Location of Work and Product Description:

3.1 Location of Work. Onondaga Lake is located along the northern end of the City of Syracuse in Onondaga County, New York (Figure 1). The lake's watershed is located almost entirely within Onondaga County. The lake covers an area of 4.6 square miles, has a mean depth of 35 feet and a maximum depth of 63 feet. It is approximately one mile wide and 4.6 miles long, and receives water from a land area, (i.e., *drainage basin*), of 248 square miles located almost entirely within Onondaga County.

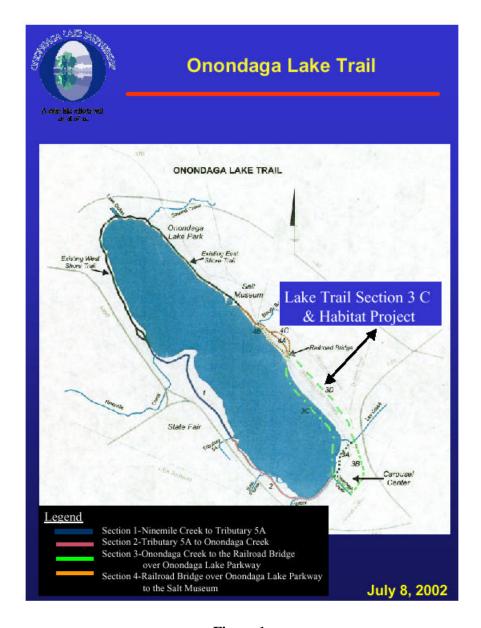


Figure 1.

3.1.1 The A-E shall perform the work necessary to complete this Scope of Work (SOW) at its corporate location(s), on and around Onondaga Lake, as well as at other locations as determined by the USACE.

3.2 Product Description.

- 3.2.1 The A-E shall prepare an Engineering & Design Quality Control Plan (E&D QCP) as defined in Section C.3 of the base contract to cover development of all products described in this Delivery Order for submittal to the USACE. The E&D QCP must be completed by the A-E and reviewed by the USACE, Buffalo District prior to the A-E performing any subsequent work under this Scope of Work (SOW).
- 3.2.2 The A-E shall review existing information and perform baseline field investigations supporting the preparation of memoranda and a report defining the existing project conditions, project goals and objectives. The A-E shall develop conceptual project design alternatives and performance evaluation criteria to guide the selection of the most favorable alternative(s). The A-E shall attend, participate in, and in the case of the Technical Project Planning (TPP) meeting, facilitate, a number of meetings with the USACE, project stakeholders and the public
- 3.2.3 The A-E shall complete a Feasibility Study on the design and construction of Trail Section 3C and associated wetlands and aquatic habitats, which constitutes the Onondaga Lake Trail & Habitat Project. This Feasibility Study shall be performed in accordance with the Work Order Task descriptions contained in this A-E SOW, applicable guidance documents, and sound engineering practice.
- 3.2.4 The A-E shall prepare draft and final Environmental Impact Statement (EIS) documents for The Onondaga Lake Trail & Habitat Project as required by the National Environmental Policy Act (NEPA). Additionally, the A-E shall consider and satisfy the Federal Highway Administration (FHWA) NEPA "checklist" and separable environmental compliance and documentation requirements. The A-E shall attend and participate in a number of meetings addressing these requirements.
- 3.2.5 The A-E shall prepare a Design Documentation Report for the Trail Section 3C and habitat configuration identified as preferred during the Feasibility Study. This Design Documentation Report shall be prepared in accordance with the Work Order Task descriptions contained in this A-E SOW, and applicable guidance documents. The A-E is **not** required to provide a price proposal for preparation of a Design Documentation Report with its price proposal for Tasks One, Two, Three and Four of the current SOW. The A-E may be requested to provide a price proposal for preparation of a Design Documentation Report in the future.
- 3.2.6 The A-E shall prepare complete Plans and Specifications for the Trail Section 3C and habitat configuration developed in the Design Documentation Report. The Plans and Specifications shall be prepared in accordance with the Work Order Task descriptions contained in this A-E SOW, and applicable guidance documents. The A-E is **not** required to provide a price proposal for preparation of Plans and Specifications with its price proposal for Tasks One, Two, Three, and Four of the current SOW. The A-E may be requested to provide a price proposal for preparation of Plans and Specifications in the future.
- 3.2.7 For all field activities associated with the performance of this SOW, the A-E shall develop work plans including a Site Safety and Health Plan (SSHP) in accordance with the requirements found in Appendix C of the document entitled "ER 385-1-92: U.S. Army Corps of Engineers (USACE), Safety and Occupational Health Document Requirements for Hazardous, Toxic and Radioactive Waste (HTRW) and Ordinance and Explosive Waste (OEW) Activities". The SSHP shall be sufficient in scope and detail to protect on-site personnel, the environment and potential offsite receptors from the chemical, biological, radiological and/or physical hazards particular to the performance of the environmental assessment and geotechnical site investigation activities required

by this SOW. The A-E shall submit the qualifications of the A-E's Health & Safety personnel for review by the USACE, Buffalo District. SSHP must be completed by the A-E and reviewed by the USACE, Buffalo District for technical accuracy and compliance with USACE and OSHA regulations prior to performing any field activities.

4.0 Work Order Tasks:

The A-E shall note that Task Five – Design Documentation Report (Optional) and Task Six – Plans and Specifications (Optional) are optional tasks. The A-E is **not** required to provide a price proposal for performance of Task Five or Task Six with its price proposal for the performance of Tasks One, Two, Three, and Four. The Government may, or may not elect to include Task Five and Task Six in the scope of a future task order.

4.1 Task One – Engineering & Design Quality Control Plan and Independent Technical Review.

- 4.1.1 *Subtask 1.01 Engineering & Design Quality Control Plan:*
 - 4.1.1.1 The A-E shall prepare and execute an Engineering & Design Quality Control Plan (E&D QCP) as defined in Section C.3 of the base contract to cover development of all products described in this Delivery Order for submittal to USACE. An E&D QCP is the A-E's management plan for execution of all aspects of the contract. It describes the way the A-E will produce the deliverables and the steps that will be taken to control product quality, i.e., the design, engineering drawings, and the Independent Technical Review (ITR) required under the contract for this project. The A-E shall prepare and submit an E&D QCP in accordance with Section 8.0 Submittal Requirements and Schedule. The following items are key components of an E&D QCP, but should not be interpreted as excluding others:
 - 4.1.1.1.1 Management Philosophy. Discuss the organization's technical management philosophy relative to its commitment to quality. If the firm has undergone a peer review of its organization, practices and procedures, a statement should be made describing it. Give the date, the name of the person(s) who conducted the peer review, and a brief description of resulting changes.
 - 4.1.1.1.2 Management Approach. Define the specific management methodology to be followed during the performance of the work, including such aspects as documentation management and control, communications, design coordination procedures, checking, and managerial continuity and flexibility. References to approved specific company policy and procedures are appropriate.
 - 4.1.1.1.3 Management Structure. Delineate the organizational composition of the A-E firm to clearly show the interrelationship of management and the design team components, including all consultants. Include an organization chart to identify by name the key project delivery team, quality control team, and Independent Technical Review (ITR) team members. Show their specific responsibilities related to the project and some indication as to the extent of their knowledge (whether they are senior or junior members, professional standing, etc.). The A-E shall include the qualifications (i.e., resume) and experience of all the team members. Quality Control should be a continual process during product development with internal quality control meetings occurring on a regular basis.
 - 4.1.1.1.4 Project Risks. List and describe the risks inherent to the project. Risk factors will determine the appropriate level of effort required for the E&D QCP.

- 4.1.1.1.5 Design Tools. Describe the design tools that will be used in execution of the contract, such as CADD, MCACES, SPECSINTACT, MATHCAD, DrChecks, computer application programs, Corps-approved design programs, etc. All calculations shall be generated electronically.
- 4.1.1.1.6 Schedule. Clearly show the design review meetings by the quality control team and product delivery team and correction periods scheduled prior to submittals. The schedules shall also include adequate review periods for the USACE quality assurance team as required by the scope of work. The A-E shall provide and maintain/update a critical path schedule showing the sequence of events involved in carrying out specific tasks within the specified period of service. Identify design activities/tasks, their expected duration and planned and actual accomplishment, along with any milestones to be met in order to successfully complete the design. Primavera (SURETRACK, Project Manager, 2.0) format is preferred.
- 4.1.1.1.7 Cost Control. Describe how project costs will be monitored and controlled.
- 4.1.1.1 8 Communications. Discuss the methods by which clear and accurate communications are to be achieved within the organization, and outside the organization. For instance, indicate the frequency and type of meetings, both in-house and with USACE. Also describe how conflicts relating to both internal and external comments will be resolved. Indicate the names of all parties authorized to request modifications to the work, and specifically how these modifications will be coordinated and documented.

4.1.2 Subtask 1.02 – Independent Technical Review:

- 4.1.2.1 The A-E shall perform an Independent Technical Review (ITR) of all key deliverables (as detailed in Section 8.2 Submittal Requirements Summary) before they are submitted to the USACE for review. The ITR will focus primarily on conformance to the approved design and appropriate technical criteria for function, reliability, and safety. Although the ITR is not for value assessment or value engineering, such comments may be a natural outcome of the review. Such comments will be considered suggestions and will not require formal response.
- 4.1.2.2 The A-E's goal shall be to submit complete and technically sound, implementable documents sufficient for acceptance upon initial review by the USACE. To accomplish this, the A-E is encouraged to contact the USACE Project Manager, during development of each submittal, to discuss issues such as methodology, regulation interpretation, etc. with relevant technical staff.
- 4.1.2.3 Performance of the ITR shall not be accomplished by the same personnel that produced the product. Personnel performing the ITR must have different supervision than those individuals producing the product. This is to ensure that a truly independent technical review is accomplished. If the A-E elects to have the review done by another agency or firm, it shall identify that agency in the E&D QCP. Upon completion of the ITR, the A-E shall submit to USACE a Completion / Certification of Independent Technical Review signed by the reviewer(s), along with responses to comments received. An example of this Completion / Certification of Independent Technical Review is provided as Attachment 1 to this scope of work.
- 4.1.2.4 It is understood that performance of the ITR on the work products required by this scope of work may result in the generation of comments and/or concerns that would normally be addressed during subsequent finalization of the subject work product. These comments and/or concerns should nevertheless be noted on the Completion / Certification of Independent Technical Review for the ITR completed on the work products.

4.2 Task Two – Project Definition

- 4.2.1 Subtask 2.01 Define Existing Project Conditions, Project Goals / Objectives, and Performance Evaluation Criteria:
 - 4.2.1.1 The A/E shall assemble and review all pertinent available project information including, but not necessarily limited to, project documents previously furnished by the USACE to the A/E, project work product developed by other government agencies, and project or similar work product developed by the A/E. The USACE shall identify all available project information prior to issuance of Notice to Proceed. In the event that the A-E becomes aware of other information, not previously identified, that it believes is essential to completion of this SOW, the A-E shall promptly notify the USACE in writing. The A-E shall not expend any resources to obtain or review such information unless directed to do so in writing by the USACE.
 - 4.2.1.2 The A-E shall prepare and submit a "Project Definition Documentation Memorandum" that documents existing project conditions as identified from available information, presents data needs to complete the understanding of the baseline conditions (as necessary to proceed with development of project concepts) and presents a summary of constraints applicable to the subject project. Additionally, the Project Definition Documentation Memorandum will document the intended project goals / objectives, and provide project performance evaluation criteria.
- 4.2.2 *Subtask* 2.02 *Baseline Field Investigations:*
 - 4.2.2.1 The A-E shall conduct field investigations of the project site and vicinity as necessary to supplement the information reviewed under Subtask 2.01. The field investigations to be conducted under this subtask shall include an ecological assessment (including wetlands), a Stage 1A Cultural Resources Survey, and the generation of sufficient water quality data to facilitate completion of subsequent tasks of this SOW.
 - 4.2.2.2 The A-E shall prepare and submit draft and final Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) which together form the Sampling and Analysis Plan (SAP). The FSP will include a narrative describing all proposed field investigation activities and present proposed sampling locations indicated on a scale figure of the project site and coordinates (latitude and longitude) presented in tabular form. The QAPP will provide analytical parameter, preparation analysis methods, practical quantitation limits, and method detection limit (MDL), by medium, for each sample presented in tabular form. The QAPP shall also include a statement of qualifications and certifications for all analytical laboratories to be utilized for sample analysis.
 - 4.2.2.3 The A-E shall prepare and submit draft and final Site Safety and Health Plan (SSHP) that addresses all aspects of the performance of the baseline field investigations. The SSHP shall be a comprehensive document limited to site-specific safety and health requirements and procedures based on site-specific conditions and the expected work activities. The SSHP shall contain the health and safety criteria, procedures, and practices sufficient to protect on-site personnel, the environment and potential off-site receptors from the chemical, biological, radiological, and/or physical hazards particular to the site. The A-E shall avoid providing material of a general nature not specifically related to this project or site. Previous versions of existing off-the-shelf SSHP's are <u>not</u> acceptable. The SSHP shall be prepared following the format found in USACE publication "U.S. Army Corps of Engineers (USACE), Safety and Occupational Health Document Requirements for Hazardous, Toxic and Radioactive Waste (HTRW) and Ordinance and Explosive Waste (OEW) Activities, ER 385-1-92, Appendix C". Procedures provided in that document for performance of Activity Hazard

- Analysis (AHA) for all tasks shall be followed exactly and include all the applicable elements or requirements, unless negatively declared.
- 4.2.2.4 Site access will be coordinated with the USACE. The A-E shall notify the USACE Project Manager at least ten (10) business days prior to its proposed date(s) for activities at the project site. The A-E shall be responsible for securing all required Rights of Entry.
- 4.2.2.5 The A-E shall prepare and submit a "Baseline Conditions Memorandum" that describes the field and laboratory activities performed, and presents the results of the Baseline Field Investigation. The information contained in this memorandum shall further document existing project conditions and supplement the information reviewed under Subtask 2.01.
- 4.2.3 Subtask 2.03 NEPA Scoping Meeting #1 (Public Uptake):
 - 4.2.3.1 The A-E shall prepare for, attend, and participate in, a public meeting to be held in Syracuse, NY. The purpose of the meeting is to present the development to date of the Onondaga Lake Trail and Habitat Project to the public. Specifically, the content of the Project Definition Documentation and Baseline Conditions memoranda will be discussed, as well as the planned alternatives development and evaluation. In addition to providing an opportunity for public "up-take" of project information, this meeting shall serve as a NEPA Scoping Meeting.
 - 4.2.3.2 The A-E shall prepare presentation materials for use at the NEPA Scoping Meeting #1. These presentation materials may include, but are not necessarily limited to, poster boards, PowerPoint presentation, slides and hardcopy handouts.
 - 4.2.3.3 The A-E shall prepare minutes of the subject meeting and electronically submit a draft of these meeting minutes to the USACE Buffalo District Project Manager for review and comment within five (5) business days of the date of the subject meeting. The minutes shall be prepared in sufficient detail to document all items discussed, identify unresolved items, action items assigned, due dates, and any other pertinent information. Within five (5) business days following acceptance by the USACE Buffalo District Project Manager of the content of the minutes, the A/E shall submit an electronic copy of the final meeting minutes. Additionally, the A-E shall prepare and submit a videotape recording of the subject meeting.

4.2.4 Subtask 2.04 – Alternative Development:

- 4.2.4.1 In consideration of information gathered and/or developed under the preceding subtasks, the A-E shall perform sufficient engineering and design to refine the project features and update the baseline project performance. Based on this effort, the A-E shall develop a limited number (e.g., 3 5) concept level alternatives for Trail Section 3C and associated habitats. These concept level alternatives shall be developed in sufficient scope and detail to convey the intended form and function and allow for preliminary evaluation for each alternative. The concept level alternatives shall consider real estate requirements and identify and assess potential areas of contamination including the effects on project lands, worker and end user health and safety, material disposal, and regulatory compliance strategies. These alternatives, in addition to enhancing/establishing nearshore aquatic habitat and ensuring appropriate water exchange for varying hydrologic conditions, shall offer a selection of human amenities such as viewing platforms, rest/safe harbor areas and alternative access/egress routes.
- 4.2.4.2 The A-E shall prepare and submit an "Alternative Development Memorandum" that builds on the information gathered under previous subtasks and presents the limited number of concept level alternatives developed for Trail Section 3C and associated habitats. The presentation shall be in

sufficient scope and detail to convey the form and function of each alternative. Advantages and disadvantages of each alternative shall be discussed in the subject memorandum. The Alternative Development Memorandum shall also serve as a basis for discussion during the Technical Project Planning Meeting (Subtask 2.05), and will be provided to all participants prior to that meeting as a "read ahead".

4.2.5 *Subtask* 2.05 – *Technical Project Planning Meeting:*

- 4.2.5.1 The A-E shall prepare for, attend, and actively participate in, a two-day Technical Project Planning (TPP) meeting with the project sponsors, involved agencies and organizations, the Coordination Review Team (CRT) and the USACE. The meeting will be held in Syracuse, New York, and will be scheduled by the USACE Buffalo District.
- 4.2.5.2 The purpose of the TPP Meeting is for the lead Non-Federal project representatives, the USACE Buffalo District Project Manager, the USACE Buffalo District Project Engineer, and the A-E to reach a common understanding of the purpose, objectives and special requirements of the subject project. The primary objective of the TPP Meeting is to solicit input from all project stakeholders and reach a consensus on which concept level alternative(s) warrant further development. The first day's topics will be design related, and the second day's topics will be related to NEPA / environmental issues.
- 4.2.5.3 The A-E shall provide the services of a professional facilitator capable and experienced in the facilitation of technical project planning meetings. The A-E shall submit the qualifications of the proposed facilitator to the USACE Project Manager for approval at least ten business days prior to the date of the TPP meeting.
- 4.2.5.4 The A-E shall prepare presentation materials for use at the TPP meeting. These presentation materials may include, but are not necessarily limited to, poster boards, PowerPoint presentation, slides and hardcopy handouts.
- 4.2.5.5 The A-E shall prepare minutes of the subject meeting and electronically submit a draft of these meeting minutes to the USACE Buffalo District Project Manager for review and comment within five (5) business days of the date of the subject meeting. The minutes shall be prepared in sufficient detail to document all items discussed, identify unresolved items, action items assigned, due dates, and any other pertinent information. Within five (5) business days following acceptance by the USACE Buffalo District Project Manager of the content of the minutes, the A/E shall submit an electronic copy of the final meeting minutes.

4.2.6 *Subtask* 2.06 – *Alternative Refinement*:

- 4.2.6.1 With consideration for the outcome of the TPP Meeting, the A-E shall refine the concept level alternative(s) that demonstrate the highest potential for successful implementation. This refinement of the selected concept level alternative(s) will consider constructibility, cost, and the degree to which safety, reliability, and functional requirements (including operations and maintenance) are met. The A-E's evaluation shall determine the relative engineering performance and costs for the various structural and nonstructural alternatives, and provide a decisive comparison between alternatives.
- 4.2.6.2 The A-E shall prepare and submit a draft and final "Project Definition Documentation Report". This report will provide a comprehensive summary of the project development to date. The Project Definition, Baseline Conditions, and Alternative Development memoranda may be included as attachments, or included by reference, to document those aspects of the project development. A

discussion of the outcomes of the TPP Meeting and Alternative Refinement efforts shall be included, as well as the rationale for the selection of the preferred alternative(s).

- 4.2.7 *Subtask* 2.07 *NEPA Scoping Meeting* #2:
 - 4.2.7.1 The A-E shall prepare for, attend, and participate in, a public meeting to be held in Syracuse, NY. The purpose of the meeting is to present the development to date of the Onondaga Lake Trail and Habitat Project to the public. Specifically, the content of the Project Definition Documentation Report will be discussed, as well as the planned feasibility analysis and alternative recommendation. This meeting will provide an opportunity for additional public review and comment and shall serve as a second NEPA Scoping Meeting.
 - 4.2.7.2 The A-E shall prepare presentation materials for use at the NEPA Scoping Meeting #2. These presentation materials may include, but are not necessarily limited to, poster boards, PowerPoint presentation, slides and hardcopy handouts.
 - 4.2.7.3 The A-E shall prepare minutes of the subject meeting and electronically submit a draft of these meeting minutes to the USACE Buffalo District Project Manager for review and comment within five (5) business days of the date of the subject meeting. The minutes shall be prepared in sufficient detail to document all items discussed, identify unresolved items, action items assigned, due dates, and any other pertinent information. Within five (5) business days following acceptance by the USACE Buffalo District Project Manager of the content of the minutes, the A/E shall submit an electronic copy of the final meeting minutes. Additionally, the A-E shall prepare and submit a videotape recording of the subject meeting.

4.3 Task Three – Feasibility Study

- 4.3.1 Subtask 3.01 Data Gap Analysis:
 - 4.3.1.1 The A-E shall review all available project information and identify any "gaps" in the information that will hamper or preclude the engineering evaluation of the feasibility of the selected alternatives.
 - 4.3.1.2 The A-E shall prepare and submit a "Data Gap Analysis Memorandum" identifies any "gaps" in the available project information that will hamper or preclude the engineering evaluation of the feasibility of the selected alternatives.
- 4.3.2 *Subtask 3.02 Field Investigation:*
 - 4.3.2.1 The A-E shall conduct field investigations of the project site and vicinity as necessary to fill any "gaps" in the information acquired to date and facilitate an engineering evaluation of the feasibility of the selected alternative(s). The outcome of the feasibility evaluation will be the recommendation by the A-E of the alternative that best satisfies the project objectives. The field investigations to be conducted under this subtask may include geotechnical sampling and analysis, sediment sampling and analysis, coastal analysis, and hydrologic/hydraulic analysis.
 - 4.3.2.2 The A-E shall prepare and submit draft and final Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) which together form the Sampling and Analysis Plan (SAP). The FSP will include a narrative describing all proposed field investigation activities and present proposed sampling locations indicated on a scale figure of the project site and coordinates (latitude and longitude) presented in tabular form. The QAPP will provide analytical parameter, preparation analysis methods, practical quantitation limits, and method detection limit (MDL), by medium, for

each sample presented in tabular form. The QAPP shall also include a statement of qualifications and certifications for **all** analytical laboratories to be utilized for sample analysis.

- 4.3.2.3 The A-E shall prepare and submit a draft and final Site Safety and Health Plan (SSHP) that addresses all aspects of the performance of the baseline field investigations. The SSHP shall be a comprehensive document limited to site-specific safety and health requirements and procedures based on site-specific conditions and the expected work activities. The SSHP shall contain the health and safety criteria, procedures, and practices sufficient to protect on-site personnel, the environment and potential off-site receptors from the chemical, biological, radiological, and/or physical hazards particular to the site. The A-E shall avoid providing material of a general nature not specifically related to this project or site. Previous versions of existing off-the-shelf SSHP's are <u>not</u> acceptable. The SSHP shall be prepared following the format found in USACE publication "U.S. Army Corps of Engineers (USACE), Safety and Occupational Health Document Requirements for Hazardous, Toxic and Radioactive Waste (HTRW) and Ordinance and Explosive Waste (OEW) Activities, ER 385-1-92, Appendix C". Procedures provided in that document for performance of Activity Hazard Analysis (AHA) for all tasks shall be followed exactly and include all the applicable elements or requirements, unless negatively declared.
- 4.3.2.4 Site access will be coordinated with the USACE. The A-E shall notify the USACE Project Manager at least ten (10) business days prior to its proposed date(s) for activities at the project site. The A-E shall be responsible for securing all required Rights of Entry.
- 4.3.2.5 The A-E shall prepare and submit a "Field Investigation Results Memorandum" that describes the field and laboratory activities performed, and presents the results of the Field Investigation. The information contained in this memorandum shall further document existing project conditions and supplement the project information assembled to date.
- 4.3.3 *Subtask 3.03 Feasibility Analysis / Alternative Recommendation:*
 - 4.3.3.1 The A-E shall, through engineering analysis, determine the engineering and environmental feasibility of the selected concept alternatives for an in-lake causeway in the proposed location. The A-E shall also determine the engineering feasibility and environmental and ecological appropriateness of establishing wetlands and near-shore aquatic habitats in the proposed locations. The environmental review component shall include an overview of the project area that extends beyond the immediate site location to adjacent properties with an evaluation of the landscape, land use, unique resources and any environmental stoppers (e.g., sediment quality, endangered species) that may be present.
 - 4.3.3.2 The A-E shall prepare and submit preliminary draft and draft Feasibility Study Report. This report shall include a brief narrative description of the preliminary project design plan and, figures depicting typical cross-sections and major design features as appropriate. The description must include, where appropriate, the relationship of the proposed project to other existing or planned Federal and Non-Federal projects (e.g., Creekwalk) and real estate features. Reasoning should be provided for the selection of the plan. The A-E shall refine the cost estimate for the recommended alternative, and develop a schedule for preparation of a design documentation report and plans and specifications. The A-E shall develop a schedule for the construction of all features of the recommended alternative.
 - 4.3.3.3 The preliminary draft of the Feasibility Study Report shall be submitted in advance of the Over The Shoulder Review, and will be the focus of that review. The draft Feasibility Study Report will include all pertinent outcomes of the Over The Shoulder Review and the Public Information

Meeting (Optional). The draft Feasibility Study Report shall be a companion document to the draft Environmental Impact Statement to be prepared under Subtask 4.01, below.

- 4.3.4 Subtask 3.04 Over The Shoulder (OTS) Review
 - 4.3.4.1 The A-E shall prepare for, attend, and actively participate in, a one-day Over The Shoulder (OTS) Review meeting with the lead non-Federal project representatives and the USACE. The meeting will be held in Syracuse, New York, and will be scheduled by the USACE Buffalo District.
 - 4.3.4.2 The purpose of the OTS Review meeting is for the lead Non-Federal project representatives and the USACE Buffalo District to review the process followed during the project development, as well as the resulting conclusions, recommendations and documentation. The primary objective of the OTS Review meeting is to solicit final input from all project stakeholders prior to publishing the draft Feasibility Study Report.
 - 4.3.4.3 The A-E shall prepare and present a comprehensive overview and discussion of the results of the feasibility study. The A-E presentation shall include, but is not limited to, the following items:
 - Overview of preliminary site investigations, analysis and findings.
 - Structural and environmental findings (physical, chemical and biological conditions).
 - Identified site constraints and any environmental "stoppers" with possible solutions.
 - Alternatives development and assessment.
 - Narrative and descriptive presentation of the final suite of project concept level alternatives, from which was chosen the recommended alternative.
 - Plan view of each concept level alternative showing location of major features.
 - Cross-sections, Details and notes for each concept level alternative.
 - Feasibility determination.
 - Presentation of the recommended alternative plan for trail and habitat development.
 - Preliminary Cost to Benefit analysis of recommended alternative.
 - Overview of findings of the Environmental Impact Statement.
 - 4.3.4.4 The A-E shall prepare minutes of the subject meeting and electronically submit a draft of these meeting minutes to the USACE Buffalo District Project Manager for review and comment within five (5) business days of the date of the subject meeting. The minutes shall be prepared in sufficient detail to document all items discussed, identify unresolved items, action items assigned, due dates, and any other pertinent information. Within five (5) business days following acceptance by the USACE Buffalo District Project Manager of the content of the minutes, the A/E shall submit an electronic copy of the final meeting minutes.
- 4.3.5 *Subtask 3.05 Public Information Meeting (Optional):*
 - 4.3.5.1 The A-E shall prepare for, attend, and participate in, a public meeting to be held in Syracuse, NY. The purpose of the meeting is to present the results of the Feasibility Study of the Onondaga

Lake Trail and Habitat Project to the public. Specifically, the content of the draft Feasibility Study will be discussed.

- 4.3.5.2 The A-E shall prepare presentation materials for use at the Public Information Meeting (Optional). These presentation materials may include, but are not necessarily limited to, poster boards, PowerPoint presentation, slides and hardcopy handouts.
- 4.3.5.3 The A-E shall prepare minutes of the subject meeting and electronically submit a draft of these meeting minutes to the USACE Buffalo District Project Manager for review and comment within five (5) business days of the date of the subject meeting. The minutes shall be prepared in sufficient detail to document all items discussed, identify unresolved items, action items assigned, due dates, and any other pertinent information. Within five (5) business days following acceptance by the USACE Buffalo District Project Manager of the content of the minutes, the A/E shall submit an electronic copy of the final meeting minutes. Additionally, the A-E shall prepare and submit a videotape recording of the subject meeting.

4.4 Task Four - Environmental Impact Statement (EIS)

- 4.4.1 Subtask 4.01 Prepare Draft EIS:
 - 4.4.1.1 The A-E shall prepare and submit preliminary draft and draft Environmental Impact Statement (EIS) presenting, as appropriate, compliance documentation sufficiently developed to satisfy NEPA and FHWA environmental compliance the requirements and the technical objective(s) of this project.
 - 4.4.1.2 The EIS shall address the following items as they relate to the subject project: Problems, Needs, Opportunities, Objectives; Considered Alternatives and Evaluation; Existing Conditions and Futures; Environmental Assessment (Effects); Coordination and Compliance.
- 4.4.2 *Subtask* 4.02 *Prepare Final EIS*:
 - 4.4.2.1 The A-E shall prepare and submit preliminary final and final Environmental Impact Statement (EIS) presenting, as appropriate, the required NEPA and FHWA environmental and compliance documentation sufficiently developed to satisfy the technical objective(s) of this project.
 - 4.4.2.2 The EIS shall addresses the following items as they relate to the subject project: Problems, Needs, Opportunities, Objectives; Considered Alternatives and Evaluation; Existing Conditions and Futures; Environmental Assessment (Effects); Coordination and Compliance.

4.4 Task Five – Design Documentation Report (Optional)

Subtasks – TBD

4.5 Task Six – Plans and Specifications (Optional)

Subtasks - TBD

5.0 Period of Performance:

All work under Tasks One, Two, Three, and Four shall be completed by 16-Sep-04, based on an assumed Notice to Proceed (NTP) date of 30-Sep-02. The period of performance for Tasks Five and Six will be determined prior to the issuance of the NTP for those tasks.

6.0 Technical Criteria and Standards:

All site investigation activities and health and safety documents required by this Scope of Work shall comply with and reflect, at a minimum, the Reference Standards identified in Section C.2. *Technical Criteria and Standards*, of Contract DACW49-01-D-0003, engineering and planning guidelines and standards of the Onondaga County and New York State Departments of Transportation, as well as the following regulations and appropriate guidance publications, as applicable.

6.1 General.

- U.S. Army Corps of Engineers (USACE), Safety and Health Requirements Manual, EM 385-1-1 (latest revision).
- Other applicable Federal, State and local safety and health requirements.
- EM 200-1-3, Requirements for the Preparation of Sampling and Analysis Plans, 01 Feb 01.
- EM 1110-1-1804, Geotechnical Investigations, 01 Jan 01.
- ER 1110-1-8156, Policies, Guidance, and Requirements for Geospatial Data and Systems, 01 Aug 96
- **6.2 Transportation.** The A-E shall prepare and perform all work in accordance with the NYSDOT guidance and standards provided in the following documents:
 - Engineering Instructions
 - Standard Specifications for Construction and Materials
 - Scoping Procedure Manual
 - Highway Design Manual Volumes I and II
 - Surveying Standards & Procedures Manual
 - *Highway Design Manual Appendix H* Manual Revaluation Statement
 - Interim Guide to Metric Design
 - Pavement Rehabilitation Volumes I and II
 - The New York State Thickness Design Manual for New and Reconstructed Pavement
 - Environmental Action Plan
 - Annual Report titled "Updated of Accident Reduction Factors and Average Accident Rates"
 - Annual Report titled "Update of Accident Costs"
 - Right Of Way Mapping Procedure Manual
 - New York State Manual of Uniform Traffic Control Devices
 - Rules and Regulations Governing the Accommodation of Utilities within the State Highway Right of Way.
 - Environmental Procedures Manual
 - 1/27/88 Memorandum titled "Project Scale vs Traffic Volumes
 - Cost Estimating System Program & Manual, including Preliminary Estimating Program (PEP) and Price Estimating System (PES)
 - Design Consultant Manual
 - Annual Report titled "Axle Factor Update"

In addition, all work shall be designed in accordance with the following documents or their current replacement policy:

• A Policy Guide Design of Highways

- A Policy on Design Standards Interstate and Streets, American Association of System, AASHTO State Highway and Transportation (AASHTO)
- Highway Traffic Data for Urbanized Area Project Planning and Design, NCHRP Report 255
- Highway Capacity Manual, Social Report 209, Transportation Research Board
- Guide for the Development of Bicycle Facilities, AASHTO 1999
- Guide Specifications for Design of Pedestrian Bridges 1997, AASHTO
- ADA Accessibility Guidelines for Buildings
- FHWA Technical Advisory T6640.8A, 10/30/87 And Facilities (Environmental Analysis)
- Eminent Domain Procedure Law Guidelines
- Locally Administered Federal Aid Procedures Manual

In addition to maintaining project compliance with all relevant and pertinent local, State, and Federal laws and environmental regulations in accordance with National Environmental Policy Act (NEPA) requirements, the A-E shall establish a thorough knowledge of the separable FHWA NEPA requirements.

6.3 Environmental. The A-E' work shall meet the requirements of all applicable state and federal environmental laws, regulations and policies including, but not limited to:

6.3.1 State Authority:

Freshwater Wetland Act Article 24 of Environmental Conservation Law

(6 NYCRR Parts 662, 663, 664)

Water Quality Certification 6 NYCRR Part 608

Forever Wild Provisions of NYS Constitution Article XIV of NYS Certification

Section 814 of Executive Law Parks, Recreation and Historic Preservation (9 Historic Preservation Act) Law, Section 14.09

Wild, Scenic & Recreational Rivers

Article 15, Title 27 of Environmental Law (6 NYCRR Part 666)

State Pollution Discharge Elimination Article 17, Title 8 of Environmental Law Conservation System (SPDES)

State Environmental Quality Review Article 8 of Environmental Conservation Law

(SEQR) Act (17 NYCRR Part 15)

Hazardous Waste and Substance Article 27, 37 & 40 of Environmental Conservation Regulations Law (6 NYCRR Parts 370-376)

Industrial Code Rule 56 (Asbestos) 6 NYCRR Parts 360 and 370

12 NYCRR Part 56

Floodplain Management Criteria for Article 36 of Environmental Conservation Law

State Projects (6 NYCRR Part 502)

Endangered and Threatened Species Article 11, Title 5 of Environmental Law

Protection Conservation

Air Quality - Indirect Source Permits Article 19 of Environmental Conservation Law (6 NYCRR Part 203) 6.3.2 Federal Authority: Farmland Protection Policy Act 7 USC 4201-4209 (7 CFR 658) 33 USC 1341 (Section 401 of the Federal Water Water Quality Certification Pollution Control Act) Flood Plain Management Executive order 11988 42 USC 4001 et seg., 44 CFR 60.3, 23 CFR 650A; see also Executive Order 111988 and DOT Order 5650.2 Protection of Wetlands Executive Order 11990 DOT Order 5660.1A (8/24/78); 23 CFR 777 Dredge and Fill Permit (U.S. Army Corps. Of 33 USC 1344 Engineers Section 404 Permit) 33 CFR 320-325 40 CFR 230 & 231 Rivers and Harbors Act, Section 9;Bridges Over 33 USC 401 (33 USC 525-533); 23 USC 144 Navigable Waters, Chapter 11(U.S. Army Corps. 33 CFR 114-115 of Engineers and U.S. Coast Guard permits) National Historic Preservation Act. Section 106 16 USC 470f Noise Abatement Requirements 23 CFR 772 (FHWA Regulation) Rivers and Harbor Act, Section 10 (U.S. 33 USC 403 Army Corps. of Engineers) Fish and Wildlife Coordination Act 16 USC 661 National Environmental Policy Act (NEPA) 42 USC 4321: 23 CFR 771 (FHWA Regulations) Safe Drinking Water Act (Sole Source Aquifer PL 93-523, Section 1424(e); 42 USC 300f et Program) FHWA/EPA MOU seg; 40 CFR 149 Wild and Scenic Rivers Act 16 USC 1271 U.S. Department of Transportation Act 49 USC 303 Preservation of Parklands, Section 4(f) 23 USC 138; 23 CFR 771.135 Endangered Species Act 16 USC 1531-1544 Resource Conservation Response, 42 USC 6901-6992 Compensation, and Liability Act (RCRA) 42 USC 9601-9675

Toxic Substances Control Act (TSCA) 15 USC 2601

Superfund Amendments and Reauthorization PL 99-499

Act (SARA)

Clean Air Act, Air Quality Control 42 USC 7506; CFR Parts 51 and 93

7.0 Government Furnished Items:

7.1 Draft Re-Evaluation Statement, (Re-Evaluation of the Final Design Report, dated December 1992, Onondaga Lake Bikeway, East-West Shore Link), Onondaga Lake, Canal Ways Trail, City of Syracuse and Towns of Salina and Geddes, Onondaga County, New York; Onondaga County Department of Transportation.

8.0 Submittal Requirements and Schedule:

- **8.1 Submittal Requirements.** The A-E shall submit design documentation and calculations/analyses on standard 8-1/2" x 11" paper/report size and drawings shall be submitted in half-size (for inclusion into/attached to the design report) and full size. As part of the final product, A-E shall furnish one set of reproducible design drawings in a set of sheets each 24x36 inches. Each sheet shall contain a simple legend indicating placement of each sheet within the set. The A-E shall provide all drawings in the standard USACE Buffalo District outline/title block. Drawing submissions for the draft report will not require reproducibles. The number of copies required is shown in the table with paragraph 8.2.
 - 8.1.1 The USACE Buffalo District is currently undergoing a conversion to Windows2000. The A-E shall insure that all submittals are compatible with both NT4.0 and Windows2000. Drawing <u>files</u> shall be 100 percent compatible with Bentley Corporation three-dimensional Microstation version SE, without any translation by the Government. Global origin will be defined. The file format (file name) will be ".DGN". Master units to be in feet with subunits in 0.001 feet and 1 positional unit per subunit.
 - 8.1.2 The USACE Buffalo District is currently undergoing a conversion to Windows2000. The A/E shall insure that all submittals are compatible with both NT4.0 and Windows2000. The A-E shall submit all documents (i.e., workplans, reports, etc.) in both hard copy and electronic formats acceptable to the USACE Buffalo District (e.g., Microsoft Office, Adobe Acrobat PDF, etc.). Materials prepared for presentation at meetings required by this SOW shall be in MS Word and PowerPoint format. All environmental data generated under this A-E SOW shall be submitted to the USACE Buffalo District in Microsoft Access format. This includes, but may not be limited to, X, Y, Z coordinate data, sample media, analytical results, boring / well identification, and sample identification. Computer files (if practical, one file for the entire project) shall be on 1.44 Meg floppy diskettes or CD-ROM (or other format acceptable to Contracting Officer) for use on an Intel Windows NT 4.0 operating system. A-E shall include all cells used for this contract. All electronic submittals must comply with Section 508 of the Rehabilitation Act of 1973.
 - 8.1.3 Levels and Government Standards will be found in the A/E/C CADD Standard Release 2.0 available from the U. S. Army Corps of Engineers CADD/GIS Technology Center located at website: http://tsc.wes.army.mil/Products/standards/aec/aecstdweb.asp.
 - 8.1.4 Packaging and Marking. Packaging of completed work shall be accomplished such that the materials will be protected from handling damage. Each package shall contain a transmittal letter

or shipping form, in duplicate, listing the materials being transmitted, being properly numbered, dated and signed. Shipping labels shall be marked as follows:

US Army Engineer District, Buffalo Attn: CELRB-PM-PL (Ms. Traci Clever, Project Manager) Contract No. DACW49-01-D-0003 Delivery Order No. 00X 1776 Niagara Street Buffalo, NY 14207

Hand carried submissions shall be packaged and marked as above, and delivered to the same address.

8.2 Submittal Requirements Summary

Submittal Schedule		Sub	Submittal Type Required		Classification	
S	Prior to Shipment	O	Original	FIO	For Information Only	
В	Prior to Balance of Payment	P	Print / Photocopy	GR	Government Review	
A	Per S/C Schedule	T	Transparency			
M	Prior to Mobilization	M	Microfilm			
W	Prior to Commencing Work	PH	Photograph			
Y	Prior to Progress Payment	E	Electronic Format			
	For Each Specific Task	S	Sample			
Z	As Required					

NOTICES

- 1. To each item submitted, attach a copy of this form and circle the title of the item being submitted.
- 2. Failure to submit required submittals as delineated on this form may result in withholding of payment in accordance with provisions of the contract.
- 3. The Contract Administrator is responsible for distributing submittals to the requesting Department (e.g., Construction). The Department is responsible for further distributions (e.g., Site Superintendent).

		Scope of Work (SOW) Paragraph	Classification	ITR Required	Submittal Schedule (assumes NTP date of 30-Sep-02)	Submittal (No.) and Type
1	E&D Quality Control Plan - draft	4.1.1.1	GR	Yes	08-Oct-02	(3) O, E
2	E&D Quality Control Plan - final	4.1.1.1	GR	No	10-Oct-02	(3) O,E
3	Project Definition Documentation Memorandum	4.2.1.2	GR	No	05-Nov-02	(5) O,E
4	Baseline Sampling and Analysis Plan - draft	4.2.2.2	GR	Yes	25-Oct-02	(5) O,E
5	Baseline Sampling and Analysis Plan - final	4.2.2.2	GR	No	15-Nov-02	(5) O,E
6	Site Safety and Health Plan - draft	4.2.2.3	GR	Yes	25-Oct-02	(5) O,E
7	Site Safety and Health Plan - final	4.2.2.3	GR	No	15-Nov-02	(5) O,E
8	Baseline Conditions Memorandum	4.2.2.5	GR	No	13-Dec-02	(5) O,E
9	NEPA Scoping Meeting #1 Minutes / Video - draft	4.2.3.3	GR	No	30-Dec-02	(5) O,E

10	NEPA Scoping Meeting #1 Minutes / Video - final	4.2.3.3	GR	No	09-Jan-03	(5) O,E
11	Alternative Development Memorandum	4.2.4.2	GR	No	10-Jan-03	(5) O,E
12	TPP Meeting Minutes - draft	4.2.5.5	GR	No	28-Jan-03	(5) O,E
13	TPP Meeting Minutes - final	4.2.5.5	GR	No	07-Feb-03	(5) O,E
14	Project Definition Documentation Report - draft	4.2.6.2	GR	Yes	17-Feb-03	(5) O,E
15	Project Definition Documentation Report - final	4.2.6.2	GR	No	10-Mar-03	(5) O,E
16	NEPA Scoping Meeting #2 Minutes / Video - draft	4.2.7.3	GR	No	17-Mar-03	(5) O,E
17	NEPA Scoping Meeting #2 Minutes / Video - final	4.2.7.3	GR	No	27-Mar-03	(5) O,E
18	Data Gap Analysis Memorandum	4.3.1.2	GR	No	31-Mar-03	(5) O,E
19	Sampling and Analysis Plan - draft	4.3.2.2	GR	Yes	22-Apr-03	(5) O,E
20	Sampling and Analysis Plan - final	4.3.2.2	GR	No	13-May-03	(5) O,E
21	Site Safety and Health Plan - draft	4.3.2.3	GR	Yes	22-Apr-03	(5) O,E
22	Site Safety and Health Plan - final	4.3.2.3	GR	No	13-May-03	(5) O,E
23	Field Investigation Results Memorandum	4.3.2.5	GR	No	17-Jun-03	(5) O,E
24	Feasibility Study Report – preliminary draft	4.3.3.2	GR	No	01-Jul-03	(15) O,E
25	Feasibility Study Report - draft	4.3.3.2	GR	Yes	30-Jul-03	(15) O,E
26	OTS Review Meeting Minutes - draft	4.3.4.4	GR	No	09-Jul-03	(5) O,E
27	OTS Review Meeting Minutes - final	4.3.4.4	GR	No	21-Jul-03	(5) O,E
28	Public Information Meeting Minutes / Video - draft	4.3.5.3	GR	No	09-Jul-03	(5) O,E
29	Public Information Meeting Minutes / Video - final	4.3.5.3	GR	No	21-Jul-03	(5) O,E
30	Preliminary Draft EIS	4.4.1.1	GR	Yes	30-Jul-03	(15) O,E
31	Draft EIS	4.4.1.1	GR	No	30-Oct-03	(15) O,E
32	Preliminary Final EIS	4.4.2.1	GR	Yes	14-Jan-04	(15) O,E
33	Final EIS	4.4.2.1	GR	Yes	15-Apr-04	(15) O,E
34	Monthly Reports	9.1	GR	No	Monthly, NLT 10 th of following month	(2) E, O

9.0 Written Monthly Reports, Payment Requests and Accruals

- **9.1 Written Monthly Reports.** The A-E shall submit, no later than the 10th of the following month, a monthly letter (progress report) on the status of the execution of the tasks under the Delivery Order Scope of Work. This report shall include information on tasks which have been completed since the last report, tasks in progress, and tasks still to be executed. Any safety infractions, accidents, violations of regulations, delays, problems, or expected cost overruns shall be identified including recommendations/solutions. Work which is outside of the SOW but which is critical to project completion shall be explained. The A-E shall include an updated schedule as described in the E&D QCP and records of correspondence/confirmation notices. The A-E shall make a record of each telephone conversation, written correspondence, and confirmation notice regarding information related to the performance of tasks under this SOW. A summary of these records shall be submitted monthly to the Buffalo District A-E Program Manager with the monthly progress report, copy of the monthly payment request for services performed, and an accrual through the end of the month as described in paragraph 9.3.
- **9.2 Payment Requests:** Payment requests or invoices shall contain the following information as a minimum: Project Title, Contract Number, Delivery Order Number, Invoice Number (or indicate FINAL PAYMENT), date of invoice, dates covered for each invoice, total contract amount with all modifications and amounts listed individually, amounts retained, amount remaining in the contract to be completed, certification of the invoice by a responsible individual of the firm, and any other pertinent information that will assist in review and processing. The invoice must be accompanied by supporting documentation for each task worked on during the billing period. The USACE Contracting Officer cannot sign off on any invoice for which supporting documentation is not provided. Mail payments requests promptly to:

U.S. Army Engineer District, Buffalo ATTN: CELRB-TD-DM (Mr. Daniel Green, R.A., A/E Program Manager) Contract No. DACW49-01-D-0003; Delivery Order No. 00X 1776 Niagara Street Buffalo, NY 14207

9.3 Accruals. Each month, accrual information shall be presented in the following sample format:

Current Earnings & Cost Projections							
	Project Name						
Proje	Project Phase (i.e., SI, RI, FS, PP/ROD, etc.)						
	For Month Ending May 2000						
	Actual Billings	Projections	Cumulative =				
Month			Actuals +				
	Diffings		Projections				
Oct-99 \$0 \$0							
Nov-99	\$0		\$0				
Dec-99	\$0		\$0				
Jan-00	Jan-00 \$0 Feb-00 \$53,222		\$0				
Feb-00			\$53,222				
Mar-00	\$120,031		\$173,253				
Apr-00	Apr-00 \$80,349		\$253,602				
May-00	\$95,000	\$35,000	\$383,602				
Jun-00		\$200,000	\$583,602				
Jul-00	Jul-00 Aug-00		\$633,602				
Aug-00			\$633,602				
Sep-00			\$633,602				
Total:	\$348,602	\$285,000	\$633,602				

Project Name						
Project Phase (i.e., SI, RI, FS, PP/ROD, etc.)						
For Month Ending April 2000						
	Actual Billings	Projections	Cumulative =			
Month			Actuals +			
	Diffings		Projections			
Oct-99	\$0		\$0			
Nov-99	\$0		\$0			
Dec-99	\$0		\$0			
Jan-00	\$0		\$0			
Feb-00	\$53,222		\$53,222			
Mar-00	\$120,031		\$173,253			
Apr-00	\$60,349	\$20,000	\$253,602			
May-00		\$130,000	\$383,602			
Jun-00		\$200,000	\$583,602			
Jul-00		\$50,000	\$633,602			
Aug-00			\$633,602			
Sep-00			\$633,602			
Total:	\$233,602	\$400,000	\$633,602			

Last Month's Earnings & Cost Projections

The table shall include actual billings, accruals, and projections of costs for each month remaining in the fiscal year (i.e., 01 October 2001 - 30 September 2002). Updated earnings and cost projections for the current month shall be presented along side accrual information from the previous month.

Actual payments made may not include all of the earned value of work performed in a given month. Accruals are used to provide projections of the incremental costs not yet paid for, but earned. Consequently, there may be instances where both actual payments and an accrual must be entered for the current month. Accruals may also be entered for previous months where no billings/payments have been made but work has been accomplished.

10.0 Progress Reporting / Meetings

In addition to the required written monthly report submittals, the A-E is required to initiate and conduct biweekly telephone conference calls with the Buffalo District Project Manager, or his/her designee, to discuss Delivery Order work status and progress. A summary of these conversations shall be included in the monthly progress reports discussed in paragraph 9.1.

11.0 Public Affairs:

The A-E shall not make available to news media or publicly disclose any data generated or reviewed under this SOW. When approached by the news media, public officials, etc., the A-E shall refer them to the USACE Project Manager. Reports and data generated under this SOW shall become the property of the Government and distribution to any other entity by the A-E is prohibited, unless authorized by the USACE Contracting Officer. The USACE, Buffalo District shall prepare and publish all required legal notices.

ATTACHMENT 1

COMPLETION / CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW

/Signature/

COMPLETION OF INDEPENDENT TECHNICAL REVIEW

The (A-E) has completed the (report title) of (project name and location). Notice is hereby given that an Independent Technical Review has been conducted that is appropriate considering the level of risk and complexity inherent in the project, as defined in the Engineering & Design Quality Control Plan. During the Independent Technical Review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of assumptions; methods, procedures, and material used in analysis; alternatives evaluated, the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing USACE policy.

Date:

Design T	eam Leader		
/Signature/		Date:	
Design T	Seam Members		
/Sign	nature/	Date:	
Independ	lent Technical Review Team L	eader	
/Sign	ature/	Date:	
Independ	lent Technical Review Team M	Iembers	
		lanation of the resolution a Possible Impact	
	ed above, all concerns resu	ulting from independent te	chnical review of the project have
/Sign	nature/	Date:	
		ATTACHMENT 1	